DETAILED ACTION

Election/Restrictions

1. Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claim(s) 1 and 10, drawn to 17-*N*-Aziridinyl-17-demethoxygeldanamycin or a pharmaceutically acceptable salt thereof and a pharmaceutical composition of said compound.

Group II, claim(s) 11 – 19, 22 and 32 – 36, drawn to methods of inhibiting HGF/SF-induced, Met receptor mediated biological activity of a Met-bearing tumor or cancer cell using a compound of formula I or II.

Group III, claim(s) 20, drawn to a method of inhibiting in a subject metastasis of Met-bearing tumor or cancer cell that is induced by HGF/SF using a compound of formula I or II.

Group IV, claim(s) 21, drawn to a method of inhibiting in a subject metastasis of Met-bearing tumor or cancer cell that is induced by HGF/SF using 17-*N*-Aziridinyl-17-demethoxygeldanamycin or a pharmaceutically acceptable salt thereof.

Group V, claim(s) 23 and 24, drawn to a method of protecting against growth or metastasis of a Met-positive tumor in a susceptible subject using a compound of formula I or II.

Group VI, claim(s) 25 – 27, drawn to a method of inducing an antitumor or anticancer response in a mammal having an HGF-responsive Met-expressing tumor using a compound of formula I or II.

Group VII, claim(s) 28 – 30, drawn to 17-*N*-Aziridinyl-17-demethoxygeldanamycin or a pharmaceutically acceptable salt thereof detectably labeled with a halogen radionuclide.

Group VIII, claim(s) 31, drawn to a method of imaging tumor in a subject comprising administering an effective amount of 17-*N*-Aziridinyl-17-demethoxygeldanamycin or a pharmaceutically acceptable salt thereof detectably labeled with a halogen radionuclide.

2. The inventions listed as Groups I – VIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: compounds of

formula I such as geldanamycin and geldanamycin derivatives are known in the art to treat a HGF/SF-induced metastatic phenotype (WO 00/45805, p 6, ln 4 – 9). In formula I of the instant application, R^2=R^3=H and R^1 = methoxy (a lower alkoxy) yields the compound geldanamycin.

3. This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

The compound present and the method of use of the compound

Applicant is required, in reply to this action, to elect a single species to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The following claim(s) are generic: claims 11 – 21 and 22 – 36.

4. The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: the compound encompassed by formula I and II are a large in number and structurally diverse and they may not all possess the required activity. The addition of a halogen nuclide to a compound also results in a different general inventive concept. A method of inhibiting biological activity (as in group II), inhibiting metastasis (as in group III or IV) and a method of imaging a subject with a wide range of compounds do not share the same general inventive concept.

First Species Election Requirement

If group II, II, V or VI is elected above, Applicant is required to elect one specific compound that is used in the method.

Second Species Election Requirement

If group II is elected above, Applicant is required to elect the HGF/SF-induced, Met receptor mediated biological activity that is inhibited from the following list:

a. Induction of uPA activity

b. Growth or scatter of cells *in vitro*

c. Growth or scatter of cells *in vivo*

d. Invasion of cells *in vitro*

e. Invasion of cells *in vivo*

f. Invasion of cells that results in tumor metastasis or

g. None of the aforementioned (a – f) biological activities.

Third Species Election Requirement

If restriction group V is elected above, Applicant is required to elect whether the subject is at risk for development of said tumor (claim 23, (a)) or at risk for recurrence of said tumor in an already treated subject (claim 23, (b)).

Fourth Species Election Requirement

If group VII or VIII is elected above, Applicant is required to elect the halogen radionuclide present.

Applicant is advised that the reply to this requirement to be complete must include (i) an election of a species or invention to be examined even though the requirement be traversed (37 CFR 1.143) and (ii) identification of the claims encompassing the elected invention.

The election of an invention or species may be made with or without traverse. To reserve a right to petition, the election must be made with traverse. If the reply does not distinctly and specifically point out supposed errors in the restriction requirement, the election shall be treated as an election without traverse.

Should applicant traverse on the ground that the inventions or species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the inventions or species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C.103(a) of the other invention.

Rejoinder Notice

5. The examiner has required restriction between product and process claims. Where applicant elects claims directed to the product, and the product claims are subsequently found allowable, withdrawn process claims that depend from or otherwise require all the limitations of the allowable product claim will be considered for rejoinder. All claims directed to a nonelected process invention must require all the limitations of an allowable product claim for that process invention to be rejoined.

In the event of rejoinder, the requirement for restriction between the product claims and the rejoined process claims will be withdrawn, and the rejoined process claims will be fully examined for patentability in accordance with 37 CFR 1.104. Thus, to be allowable, the rejoined claims must meet all criteria for patentability including the requirements of 35 U.S.C. 101, 102, 103 and 112. Until all claims to the elected product are found allowable, an otherwise proper restriction requirement between product claims and process claims may be maintained. Withdrawn process claims that are not

commensurate in scope with an allowable product claim will not be rejoined. See MPEP § 821.04(b). Additionally, in order to retain the right to rejoinder in accordance with the above policy, applicant is advised that the process claims should be amended during prosecution to require the limitations of the product claims. **Failure to do so may result in a loss of the right to rejoinder**. Further, note that the prohibition against double patenting rejections of 35 U.S.C. 121 does not apply where the restriction requirement is withdrawn by the examiner before the patent issues. See MPEP § 804.01.

Joint Inventorship

6. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Nissa M. Westerberg whose telephone number is (571) 270-3532. The examiner can normally be reached on M - F, 7:30 a.m. - 5 p.m. ET.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin H. Marschel can be reached on (571) 272-0718 or Cecilia Tsang can be reached on (571) 272-0562. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

NMW

/Ardin H Marschel/

Supervisory Patent Examiner, Art Unit 1614